Linksys SPA400



Trixbox Integration Guide







Access Point – Connecting You & Your Customers.

Contact: support@voipshop.com.au

Overview:

The Linksys SPA400 is a 4 Line FXO gateway capable of connecting 4 PSTN lines to your asterisk system to make and receive calls. This guide is a step by step on how to configure Trixbox to utilize the features of the SPA400. Limitations:

- * The voicemail function of the SPA400 cannot be used.
- * You cannot select which line of the SPA400 to use. They are treated as a single group of 1-4 lines. The SPA400 will know which lines are available by the line voltage when plugged in.

Configure the SPA400:

Step 1 – Obtain the IP address if the SPA400

Option 1(Easiest): You will need to check your DHCP server to see what IP address has been allocated to the SPA400 (Will usually be in the Status area of your Modem/Router).

Option 2(Harder): If you only have a few devices on your network you can use angry IP scanner (http://www.angryziber.com) which will search your network for devices. You should be able to work out the SPA400 address. Try searching for port 5060 also to help identify.

Option 3: You can download the SPA9000 setup utility from http://www.linksys.com it will scan the network for SPA400s and show the IP address.

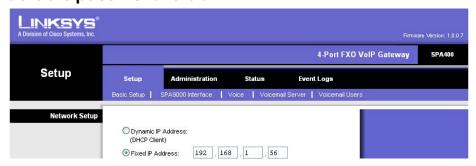
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Step 2 – Access the SPA400

In your favourite web browser type the IP address of the SPA400, it should ask for a username and password.

The **default username** is Admin (Note capital A)

The default password is blank

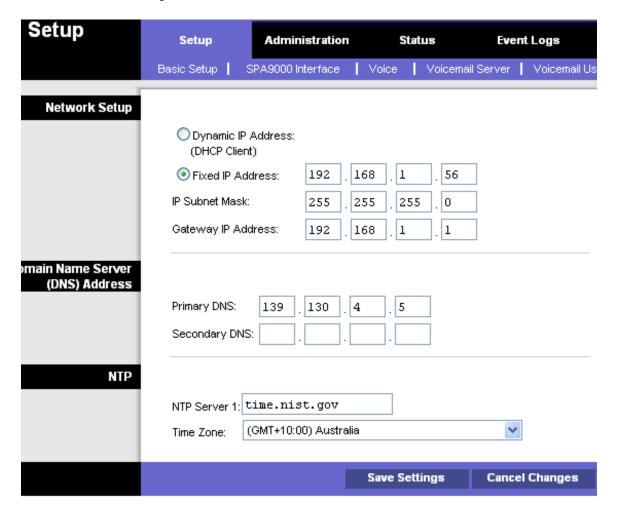


Step 3 - Set the SPA400 to a Fixed IP address

Asterisk needs to access your SPA400, so it needs to be set to a fixed ip address. To do this: -

Under Setup -> Basic Setup

- Select Fixed IP address and enter a valid fixed IP address for your network.
- Be sure to enter a DNS server, if you do not know enter the Telstra DNS server 139.130.4.5 – You can leave the secondary blank
- Set your time zone.
- Click Save Settings
- Restart System



Sample Config – Use Address Valid For Your Network Check with the network administrator if unsure.

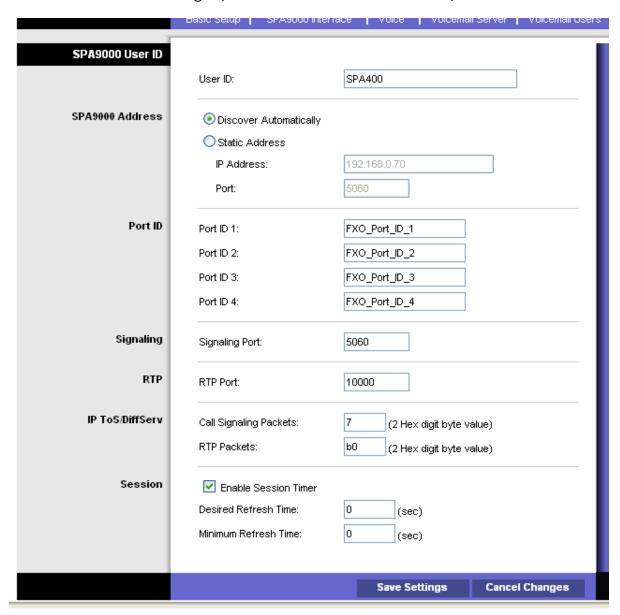
Note the IP address in the Notes Section.

Step 4 - Setup the SPA400 Voice Configuration.

Open the SPA400 in your web browser using the new IP address.

Select Setup->SPA9000 Interface.

- Enter SPA400 in the User ID:
- Leave SPA9000 on discover automatically
- No other changes should need to be made
- Click Save Settings (You Do Not Need To Restart)



Screenshot of Setup -> SPA9000 Interface

Select Setup -> Voice

For Australia you need to change: • Impedance: 220 Ohms + (820 Ohms || 120nF)
• On-Hook speed: 26ms

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Setup	Setup	Administra		Status	Ever	Event Logs	
	Basic Setup	SPA9000 Inte	rface	Voice Voi	cemail Server	Voicemail U	
Voice Coders							
Preferred Coder	⊙ G.711U	() G.711A		◯ G.729		
Voice Coders		Packetization	VAD				
voice coders	G.711U	20ms V	OFF V	,			
	G.711A	20ms 🗸	OFF V	•			
	G.729	30ms 🔽	OFF V	•			
Voice Setting							
Calling Timers	Wait-for-Ansy	wer time :	180	sec			
	Call Limit :		6553.	5 sec			
Dialing Parameters	Tone out on:		200	msec			
	Tone out off:		200	msec			
	DTMF power:		-130	(-400 ~ 30) *	D.1 dB		
	Answer after	1	rings				
	Dial out wait :	400	msec				
	Dial out batter	y threshold :	20	volts			
Line Settings	Transmit Gain	ı:	0 0	dB			
	Receive Gain:	:	0 0	яВ			
	Impedance:		220 O	hms + (820 Ohr	ns∥120 nF) 🕓	•	
	Tip/Ring volta	ge:	3.5 (d	efault) 🔽			
	Operational loop current Min:		10mA	(default) 💌			
	On-Hook speed:		26ms	(Australia)	~		
	Ring frequency Min:		10				
	Ring frequency Max:		100				
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	DC current Lir			e (default)			
	Caller Id Meth	_	UK	(asiani)	~		
		Battery reversal as disconnect signal					
		od shut-down:	_				

Step 5 - Configure Trixbox Trunk.

Open your FreePBX interface: http://trixbox.ip/admin/

Select Trunks -> Add SIP trunk

Complete the form with the details below:

Outbound Caller ID: Blank

Never Override CallerID: Unticked

Maximum Channels: (the number of pstn lines plugged into the

SPA400)

Dial Rules: Leave Empty Outbound Dial Prefix: Empty

Trunk Name: SPA400 (Can be anything you wish)

Peer Details:

allow=ulaw canreinvite=no context=from-trunk dtmfmode=rfc2833

host=**x.x.x** insecure=very type=friend user=SPA400

USER Context: Leave Blank

USER Details: Blank (Delete the default information)

Register String:

SPA400@x.x.x.x/SPA400

Note: x.x.x.x should be where you enter the IP address of the

SPA400

Click Submit Changes.

Step 6 - Configure Outbound Route.

You can now treat the SPA400 like any other trunk. To add an outbound router (eg, dial 9 to dial out the SPA400)

Outbound Routes -> Add Route

Route Name: SPA400PSTN (this can be anything)

Route Password: Blank

Emergency Dialing: Unticked Intra Company Route: Unticked

Dial Patterns: 9|.

Trunk Sequence: SPA400

Click Submit Changes

Step 7 – Configure Inbound Route.

This will setup an inbound route for people who call the PSTN lines plugged into the SPA400.

Setup -> Inbound Routes -> Add Incoming Route

DID Number: SPA400 (case sensitive)

Caller ID Number: Blank Zaptel Channel: Blank

Fax Handling Leave as is

Select the Destination

Click Submit

Click the Red "Apply Configuration Changes" to reload asterisk

Complete:

You should now be able to make and receive calls via your SPA400.

Email support@voipshop.com.au for further support if required.

Congratulations

Notes:	
SPA400 IP Address:	
SPA400 Username:	
SPA400 Password:	
Number of Lines:	_
Installed By:	
Date:	